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APPLICATION NO.	F	TLING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,547	01/24/2001		Masaru Kawai	30681-1005	8985
5179	7590	10/02/2002			
		S AND ADAMS P	EXAMINER		
P O BOX 2 ALBUQUE	OX 26927 QUERQUE, NM 871256927			HAMLIN, DERRICK G	
				ART UNIT	PAPER NUMBER
				1751	
				DATE MAILED: 10/02/2002	9

Please find below and/or attached an Office communication concerning this application or proceeding.

		45					
1	Application No.	Applicant(s)					
Office Action Summer	09/674,547	KAWAI ET AL.					
Office Action Summary	Examin r	Art Unit					
7. 1111110 0475	Derrick G. Hamlin	1751					
The MAILING DATE of this communication app Period for Reply	lears on the cover she it with	tne correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period vorce - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a repl within the statutory minimum of thirty (; will apply and will expire SIX (6) MONTH cause the application to become ABAN	y be timely filed  30) days will be considered timely.  S from the mailing date of this communication.  IDONED (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 24.5	lanuary 2001						
2a) ☐ This action is FINAL. 2b) ☑ Th	is action is non-final.						
3) Since this application is in condition for allowed closed in accordance with the practice under a Disposition of Claims							
4)⊠ Claim(s) <u>1-31</u> is/are pending in the application	) <b>.</b>						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-10, 12, 13, 15, 16, 18-20, 22, 23, 25, 26 and 28-31</u> is/are rejected.							
7) Claim(s) <u>11,14,17,21,24 and 27</u> is/are objected	7) Claim(s) 11,14,17,21,24 and 27 is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	r.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accept	oted or b) objected to by the	Examiner.					
Applicant may not request that any objection to the		• ,					
11)☐ The proposed drawing correction filed on	- , , , ,	approved by the Examiner.					
If approved, corrected drawings are required in rep	•						
12) The oath or declaration is objected to by the Ex	aminer.						
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).					
a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority documents	s have been received.						
2. Certified copies of the priority documents	s have been received in App	olication No					
3. ☐ Copies of the certified copies of the prior application from the International Bu  * See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	_					
14) Acknowledgment is made of a claim for domesti	·						
a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti	visional application has bee	n received.					
Attachment(s)	, , ,	•					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.	5) Notice of Info	mmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152)					
2 D							

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### **DETAILED ACTION**

## **Priority**

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP98/02024, filed on 5/6/1998.

# Specification

Claims 11, 14, 17, 21, 24 and 27 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 11, 14, 17, 21, 24 and 27 will not been further treated on the merits.

#### Claim Rejections - 35 USC § 112

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of an "effective amount" in claims 2, line 3, is unascertainable.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Evaluations of level of ordinary skill in the art requires consideration of factors such as various prior art approaches employed, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, failure of others, and the inventor's educational level.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this case reasonably reflect this level of skill.

Claims 1-10, 12, 13, 15, 16, 18-20, 22, 23, 25, 26 and 28-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (5085793).

Burns teaches a corrosion-inhibited antifreeze composition. Specifically, the antifreeze composition comprises a major portion of a liquid alcohol freezing point depressant and a minor portion of at least one hydroxyl-substituted aromatic carboxylic acid having the hydroxyl radical disposed proximate to the carboxylic radical. The above described acid is employed as a corrosion inhibitor. (abstract) The reference also discloses that the freezing point depressant is selected from the group consisting of ethylene glycol, diethylene glycol, propylene glycol, etc. and that the composition way be 80 to about 99 weight percent of a liquid alcohol freezing point depressant and from about 20 to about 1 weight percent of a corrosion inhibitor, said corrosion inhibitor consisting of (a) at least one hydroxyl-substituted aromatic carboxylic acid, and (b) member selected from the group consisting of alkali metal borates, alkali metal

silicates, alkali metal benzoates, alkali metal nitrates, alkali metal nitrites, alkali metal molybdates, hydrocarbyl thiazoles and mixtures thereof, a C8 -C12 aliphatic dibasic acid or the alkali metal, ammonium or amine salt of said acid (col. 5, lines 24-28 and 48-59). The reference teaches several other conventional corrosion inhibitors may be employed in conjunction with the acids which are well known in art, such as alkylbenzoic acid or the alkali metal, ammonium or amine salt thereof; C8 to C12 aliphatic monobasic acid or the alkali metal, ammonium or amine salt thereof and a hydrocarbyl triazole and; alkali metal salt of benzoic acid, an alkali metal salt of a dicarboxylic acid and an alkali metal nitrate; alkali metal carbonates, borax, the alkali metal dichromates, the alkali metal silicates, phosphorus acid, phosphoric acid; an alkali metal tungstate, benzotriazole, tolyltriazole, an alkali metal salt of benzoic or toluic acid, an alkali metal salt of a phenol, an alkanolamine and an organo-silicone compound; and 4-tert-butylbenzoic acid (col. 1, line 31 – col. 2, lines 55).

The reference fails to teach the specific use of cinnamic acids. The reference does not teach which corrosion inhibitors must be included or excluded. The reference also fails to teach the instantly claimed amounts.

Although the reference fails to teach the specific use of cinnamic acids they are encompassed in the general teaching of alkylbenzoic acid. The reference does not teach which corrosion inhibitors must be included or excluded, nor does it require anything more than a one hydroxyl-substituted aromatic carboxylic acid. The reference also fails to teach the instantly claimed amounts for each specific component, however the reference does teach the minimum and maximum amounts of liquid alcohol freezing

point depressant corrosion inhibitor and instantly claimed amounts clearly overlap with the reference.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the instantly claimed prediluted solutions, since the reference teaches a corrosion-inhibited antifreeze composition which may contain a glycol freezing point depressant and a minor portion of at least one hydroxyl-substituted aromatic carboxylic acid and additional corrosion inhibitors.

In view of the forgoing, the above claims have failed to be patently distinguishable over prior art.

### Conclusion

The remaining references listed on form(s) 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (703) 305-0590. The examiner can normally be reached on Monday-Thursday and alternating Fridays from 8:30 AM - 5:00 PM.

If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Group is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Derrick G. Hamlin

9/21/02

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SUPERVISORY PATENT EXAMINER

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